

IN THE CLAIMS:

1.-363. (Canceled)

364. (Currently Amended) The interbody fusion spacer of claim ~~363~~ 367, wherein said teeth extend across said spacer width.

365. (Currently Amended) The interbody fusion spacer of claim ~~363~~ 367, wherein said teeth include a flat crest surface extending between a leading flank surface and a trailing flank surface.

366. (Currently Amended) The interbody fusion spacer of claim ~~363~~ 367, wherein said teeth are uniformly machined into said spacer body.

367. (Currently Amended) ~~The interbody fusion spacer of claim 363, An~~
interbody fusion spacer for engagement within an intervertebral space between adjacent vertebrae, comprising:

a spacer body formed of bone and defining a spacer height, a spacer width and a spacer length extending along a longitudinal axis, said spacer body including an insertion end and an opposite tool engagement end each arranged along said longitudinal axis, said insertion end and said opposite tool engagement end each comprising a flattened end surface, said spacer body including upper and lower vertebral engaging surfaces that are flattened from said insertion end to said tool engagement end to define said spacer height, said vertebral engaging surfaces including surface features defined along said spacer length and structured to facilitate engagement with the adjacent vertebrae to inhibit movement of said spacer body within the intervertebral space, said spacer body defining a chamber extending therethrough and opening onto said vertebral engaging surfaces; and
wherein said surface features comprise teeth, and wherein said chamber interrupts at least some of said teeth extending across said spacer width.

368. (Currently Amended) The interbody fusion spacer of claim ~~362~~ 383, wherein said surface features comprise a plurality of grooves inscribed into said spacer body.

369. (Previously Presented) The interbody fusion spacer of claim 368, wherein said plurality of grooves extends across said spacer width.

370. (Currently Amended) ~~The interbody fusion spacer of claim 362, An~~ interbody fusion spacer for engagement within an intervertebral space between adjacent vertebrae, comprising:

a spacer body formed of bone and defining a spacer height, a spacer width and a spacer length extending along a longitudinal axis, said spacer body including an insertion end and an opposite tool engagement end each arranged along said longitudinal axis, said insertion end and said opposite tool engagement end each comprising a flattened end surface, said spacer body including upper and lower vertebral engaging surfaces that are flattened from said insertion end to said tool engagement end to define said spacer height, said vertebral engaging surfaces including surface features defined along said spacer length and structured to facilitate engagement with the adjacent vertebrae to inhibit movement of said spacer body within the intervertebral space, said spacer body defining a chamber extending therethrough and opening onto said vertebral engaging surfaces; and

wherein said insertion end is chamfered to facilitate insertion of said spacer body into the intervertebral space.

371. (Currently Amended) The interbody fusion spacer of claim ~~362~~ 370, wherein said spacer body includes a chamfered edge extending from said insertion end and tapering to said spacer width to facilitate insertion of said spacer body into the intervertebral space.

372. (Currently Amended) ~~The interbody fusion spacer of claim 362,~~ An interbody fusion spacer for engagement within an intervertebral space between adjacent vertebrae, comprising:

a spacer body formed of bone and defining a spacer height, a spacer width and a spacer length extending along a longitudinal axis, said spacer body including an insertion end and an opposite tool engagement end each arranged along said longitudinal axis, said insertion end and said opposite tool engagement end each comprising a flattened end surface, said spacer body including upper and lower vertebral engaging surfaces that are flattened from said insertion end to said tool engagement end to define said spacer height, said vertebral engaging surfaces including surface features defined along said spacer length and structured to facilitate engagement with the adjacent vertebrae to inhibit movement of said spacer body within the intervertebral space, said spacer body defining a chamber extending therethrough and opening onto said vertebral engaging surfaces; and

wherein said spacer body includes a pair of facing and opposing arms forming an open channel therebetween to provide said spacer body with a C-shape.

373. (Currently Amended) ~~The interbody fusion spacer of claim 362,~~ An interbody fusion spacer for engagement within an intervertebral space between adjacent vertebrae, comprising:

a spacer body formed of bone and defining a spacer height, a spacer width and a spacer length extending along a longitudinal axis, said spacer body including an insertion end and an opposite tool engagement end each arranged along said longitudinal axis, said insertion end and said opposite tool engagement end each comprising a flattened end surface, said spacer body including upper and lower vertebral engaging surfaces that are flattened from said insertion end to said tool engagement end to define said spacer height, said vertebral engaging surfaces including surface features defined along said spacer length and structured to facilitate engagement with the adjacent vertebrae to inhibit movement of said spacer body within the intervertebral space, said spacer body defining a chamber extending therethrough and opening onto said vertebral engaging surfaces; and

wherein said tool engagement end includes a slotted groove extending across said spacer width.

374. (Previously Presented) The interbody fusion spacer of claim 373, wherein said slotted groove extends entirely across said spacer width.

375. (Previously Presented) The interbody fusion spacer of claim 373, wherein said slotted groove extends to a flattened side surface of said spacer body.

376. (Previously Presented) The interbody fusion spacer of claim 373, wherein said slotted groove includes flat side surfaces.

377. (Currently Amended) The interbody fusion spacer of claim ~~362~~ 383, further comprising an osteogenic material positioned within said chamber to facilitate fusion with the adjacent vertebrae.

378. (Previously Presented) The interbody fusion spacer of claim 377, wherein said osteogenic material comprises a bone morphogenic protein.

379. (Previously Presented) The interbody fusion spacer of claim 377, wherein said osteogenic material comprises bone graft.

380. (Currently Amended) The interbody fusion spacer of claim ~~362~~ 383, wherein said spacer body is formed of allograft bone.

381. (Currently Amended) The interbody fusion spacer of claim ~~362~~ 383, wherein said spacer body is formed of cortical bone.

382. (Currently Amended) The interbody fusion spacer of claim ~~362~~ 383, wherein said spacer body is formed from the diaphysis of a long bone having an intramedullary canal, said chamber defined by at least a portion of the intramedullary canal.

383. (Currently Amended) ~~The interbody fusion spacer of claim 362, An~~ interbody fusion spacer for engagement within an intervertebral space between adjacent vertebrae, comprising:

a spacer body formed of bone and defining a spacer height, a spacer width and a spacer length extending along a longitudinal axis, said spacer body including an insertion end and an opposite tool engagement end each arranged along said longitudinal axis, said insertion end and said opposite tool engagement end each comprising a flattened end surface, said spacer body including upper and lower vertebral engaging surfaces that are flattened from said insertion end to said tool engagement end to define said spacer height, said vertebral engaging surfaces including surface features defined along said spacer length and structured to facilitate engagement with the adjacent vertebrae to inhibit movement of said spacer body within the intervertebral space, said spacer body defining a chamber extending therethrough and opening onto said vertebral engaging surfaces; and
wherein said chamber is circular.

384. (Currently Amended) The interbody fusion spacer of claim ~~362~~ 383, wherein said chamber is defined along a second axis substantially perpendicular to said longitudinal axis.

385. (Previously Presented) An interbody fusion spacer for engagement within a space between adjacent vertebrae, comprising:

a spacer body formed of bone and defining a spacer height, a spacer width and a spacer length extending along a longitudinal axis, said spacer body including an insertion end and an opposite tool engagement end each arranged along said longitudinal axis, said

tool engagement end including a slotted groove extending across said spacer width, said insertion end being chamfered to facilitate insertion of said spacer body into the space between the adjacent vertebrae, said spacer body including upper and lower vertebral engaging surfaces that are flattened from said insertion end to said tool engagement end to define said spacer height, said vertebral engaging surfaces including surface features defined along said spacer length and structured to facilitate engagement with the adjacent vertebrae to inhibit movement of said spacer body within the intervertebral space, said spacer body defining a chamber extending therethrough and opening onto said vertebral engaging surfaces.

386. (Previously Presented) The interbody fusion spacer of claim 385, wherein said surface features comprise teeth.

387. (Previously Presented) The interbody fusion spacer of claim 386, wherein said teeth extend across said spacer width.

388. (Previously Presented) The interbody fusion spacer of claim 386, wherein said teeth include a flat crest surface extending between a leading flank surface and a trailing flank surface.

389. (Previously Presented) The interbody fusion spacer of claim 386, wherein said teeth are uniformly machined into said spacer body.

390. (Previously Presented) The interbody fusion spacer of claim 386, wherein said chamber interrupts at least some of said teeth extending across said spacer width.

391. (Previously Presented) The interbody fusion spacer of claim 385, wherein said surface features comprise a plurality of grooves inscribed into said spacer body.

392. (Previously Presented) The interbody fusion spacer of claim 391, wherein said plurality of grooves extends across said spacer width.

393. (Previously Presented) The interbody fusion spacer of claim 385, wherein said insertion end and said opposite tool engagement end each comprise a flattened end surface.

394. (Previously Presented) The interbody fusion spacer of claim 385, wherein said spacer body includes a chamfered edge extending from said insertion end and tapering to said spacer width to facilitate insertion of said spacer body into the intervertebral space.

395. (Previously Presented) The interbody fusion spacer of claim 385, wherein said spacer body includes a pair of facing and opposing arms forming an open channel therebetween to provide said spacer body with a C-shape.

396. (Previously Presented) The interbody fusion spacer of claim 385, wherein said slotted groove extends entirely across said spacer width.

397. (Previously Presented) The interbody fusion spacer of claim 385, wherein said slotted groove extends to a flattened side surface of said spacer body.

398. (Previously Presented) The interbody fusion spacer of claim 385, wherein said slotted groove includes flat side surfaces.

399. (Previously Presented) The interbody fusion spacer of claim 385, further comprising an osteogenic material positioned within said chamber to facilitate fusion with the adjacent vertebrae.

400. (Previously Presented) The interbody fusion spacer of claim 399, wherein said osteogenic material comprises a bone morphogenic protein.

401. (Previously Presented) The interbody fusion spacer of claim 399, wherein said osteogenic material comprises bone graft.

402. (Previously Presented) The interbody fusion spacer of claim 385, wherein said spacer body is formed of allograft bone.

403. (Previously Presented) The interbody fusion spacer of claim 385, wherein said chamber is circular.

404. (Previously Presented) The interbody fusion spacer of claim 385, wherein said chamber is defined along a second axis substantially perpendicular to said longitudinal axis.

405. (Canceled)

406. (Currently Amended) The interbody fusion spacer of claim ~~405~~ 407, wherein said teeth are uniformly machined into said spacer body.

407. (Currently Amended) ~~The interbody fusion spacer of claim 405;~~ An interbody fusion spacer for engagement within a space between adjacent vertebrae, comprising:

a spacer body formed of bone and defining a spacer height, a spacer width and a spacer length extending along a longitudinal axis, said spacer body including an insertion end and an opposite tool engagement end each arranged along said longitudinal axis, said spacer body including upper and lower vertebral engaging surfaces that are flattened from said insertion end to said tool engagement end to define said spacer height, said vertebral

engaging surfaces including surface features defined along said spacer length and structured to facilitate engagement with the adjacent vertebrae to inhibit movement of said spacer body within the intervertebral space, said spacer body defining a chamber extending therethrough and opening onto said vertebral engaging surfaces, said surface features comprising teeth extending across said spacer width and including a flat crest surface extending between a leading flank surface and an opposite trailing flank surface, said spacer body defining a chamber extending therethrough and opening onto said vertebral engaging surfaces; and

wherein said chamber interrupts at least some of said teeth extending across said spacer width.

408. (Currently Amended) The interbody fusion spacer of claim ~~405~~ 424, wherein said surface features comprise a plurality of grooves inscribed into said spacer body.

409. (Previously Presented) The interbody fusion spacer of claim 408, wherein said plurality of grooves extends across said spacer width.

410. (Currently Amended) The interbody fusion spacer of claim ~~405~~ 414, wherein said insertion end and said opposite tool engagement end each comprise a flattened end surface.

411. (Currently Amended) The interbody fusion spacer of claim ~~405~~ 414, wherein said insertion end is chamfered to facilitate insertion of said spacer body into the intervertebral space.

412. (Currently Amended) The interbody fusion spacer of claim ~~405~~ 407, wherein said spacer body includes a chamfered edge extending from said insertion end

and tapering to said spacer width to facilitate insertion of said spacer body into the intervertebral space.

413. (Currently Amended) The interbody fusion spacer of claim ~~405~~ 407, wherein said spacer body includes a pair of facing and opposing arms forming an open channel therebetween to provide said spacer body with a C-shape.

414. (Currently Amended) ~~The interbody fusion spacer of claim 405, An~~ interbody fusion spacer for engagement within a space between adjacent vertebrae, comprising:

a spacer body formed of bone and defining a spacer height, a spacer width and a spacer length extending along a longitudinal axis, said spacer body including an insertion end and an opposite tool engagement end each arranged along said longitudinal axis, said spacer body including upper and lower vertebral engaging surfaces that are flattened from said insertion end to said tool engagement end to define said spacer height, said vertebral engaging surfaces including surface features defined along said spacer length and structured to facilitate engagement with the adjacent vertebrae to inhibit movement of said spacer body within the intervertebral space, said spacer body defining a chamber extending therethrough and opening onto said vertebral engaging surfaces, said surface features comprising teeth extending across said spacer width and including a flat crest surface extending between a leading flank surface and an opposite trailing flank surface, said spacer body defining a chamber extending therethrough and opening onto said vertebral engaging surfaces; and

wherein said tool engagement end includes a slotted groove extending across said spacer width.

415. (Previously Presented) The interbody fusion spacer of claim 414, wherein said slotted groove extends entirely across said spacer width.

416. (Previously Presented) The interbody fusion spacer of claim 414, wherein said slotted groove extends to a flattened side surface of said spacer body.

417. (Previously Presented) The interbody fusion spacer of claim 414, wherein said slotted groove includes flat side surfaces.

418. (Currently Amended) The interbody fusion spacer of claim ~~405~~ 424, further comprising an osteogenic material positioned within said chamber to facilitate fusion with the adjacent vertebrae.

419. (Previously Presented) The interbody fusion spacer of claim 418, wherein said osteogenic material comprises a bone morphogenic protein.

420. (Previously Presented) The interbody fusion spacer of claim 418, wherein said osteogenic material comprises bone graft.

421. (Currently Amended) The interbody fusion spacer of claim ~~405~~ 424, wherein said spacer body is formed of allograft bone.

422. (Currently Amended) The interbody fusion spacer of claim ~~405~~ 424, wherein said spacer body is formed of cortical bone.

423. (Currently Amended) The interbody fusion spacer of claim ~~405~~ 424, wherein said spacer body is formed from the diaphysis of a long bone having an intramedullary canal, said chamber define by at least a portion of the intramedullary canal.

424. (Currently Amended) ~~The interbody fusion spacer of claim 405;~~ An interbody fusion spacer for engagement within a space between adjacent vertebrae, comprising:

a spacer body formed of bone and defining a spacer height, a spacer width and a spacer length extending along a longitudinal axis, said spacer body including an insertion end and an opposite tool engagement end each arranged along said longitudinal axis, said spacer body including upper and lower vertebral engaging surfaces that are flattened from said insertion end to said tool engagement end to define said spacer height, said vertebral engaging surfaces including surface features defined along said spacer length and structured to facilitate engagement with the adjacent vertebrae to inhibit movement of said spacer body within the intervertebral space, said spacer body defining a chamber extending therethrough and opening onto said vertebral engaging surfaces, said surface features comprising teeth extending across said spacer width and including a flat crest surface extending between a leading flank surface and an opposite trailing flank surface, said spacer body defining a chamber extending therethrough and opening onto said vertebral engaging surfaces; and

wherein said chamber is circular.

425. (Currently Amended) The interbody fusion spacer of claim 405 424, wherein said chamber is defined along a second axis substantially perpendicular to said longitudinal axis.